

CLAIMS

What is claimed is:

- 1 1. An anchoring system, comprising:
 - 2 a housing comprising a distal region, a proximal region and an interior
 - 3 region;
 - 4 a connector attached to the housing, wherein said connector connects the
 - 5 housing to an object;
 - 6 at least one motor which is contained within and fixed to said housing,
 - 7 wherein said at least one motor is operably linked to at least one power
 - 8 source;
 - 9 at least three movable elongated members, each member comprising a
 - 10 proximal tip and a distal tip and having a retracted storage position and
 - 11 an extended operative position relative to the housing, wherein each
 - 12 elongated member is operably linked to at least one motor, and wherein
 - 13 said elongated member extends away from the distal surface of said
 - 14 housing into a penetrable environment when the elongated member is in
 - 15 an extended operative position.
- 1 2. An anchoring system according to claim 1, wherein the elongated members
- 2 are shaped like screws.
- 1 3. An anchoring system according to claim 1, wherein said elongated
- 2 members are telescoping screws having multiple layers, wherein an inner layer
- 3 extends beyond an immediately surrounding outer layer when a telescoping screw
- 4 is deployed into an extended operative position, and wherein an inner layer
- 5 retracts into an immediately surrounding layer when a telescoping screw is in a
- 6 storage position.
- 1 4. An anchoring system according to claim 1, comprising a number of
- 2 elongated members selected from the group of numbers that consists of three, four,

3 five, six, seven, eight, nine, ten, eleven, twelve, thirteen, fourteen, fifteen, sixteen,
4 seventeen, eighteen, nineteen, and twenty.

1 5. An anchoring system according to claim 1, comprising a number of motors
2 that is equal to the number of elongated members, wherein each motor is operably
3 linked to a power source and to an elongated member and the motor causes the
4 linked elongated member to move from a retracted storage position to an extended
5 operative position and from an extended operative position to a storage position.

1 6. An anchoring system according to claim 1, wherein said power source is
2 contained within said housing.

1 7. An anchoring system according to claim 1, wherein said power source is
2 remote and the power source is operably linked to said at least one motor via a
3 power line.

1 8. An anchoring system according to claim 1, wherein the distal tip of an
2 elongated member further comprises a region in which the thread angle, thread
3 height, thread pitch, pitch diameter, threads per inch, thread lead, and thread lead
4 angle are varied to facilitate penetration into a sandy or muddy penetrable
5 medium.

1 9. An anchoring system according to claim 1, further comprising at least one
2 camera.

1 10. A method of anchoring an object, comprising the steps of:
2 (a) positioning an anchor against a penetrable medium, wherein said anchor
3 comprises:
4 a housing having a distal surface region, a proximal surface region and
5 an interior region;
6 a connector attached to the housing, wherein said connector connects
7 the housing of the anchor to an object;
8 at least one motor which is contained within and fixed to said housing,
9 wherein said at least one motor is operably linked to at least one
10 power source;

11 at least three movable elongated members wherein each elongated
12 member is operably linked to at least one motor, each elongated
13 member comprising a proximal tip and a distal tip and having a
14 retracted storage position and an extended operative position relative
15 to the housing, wherein an elongated member extends away from the
16 distal surface of said housing into a penetrable environment when
17 the elongated member is in an extended operative position,

18 (b) causing said at least one motor to move an operably linked elongated
19 member from a storage position to an extended operative position in
20 which each elongated member extends from said housing into said
21 penetrable medium.

1 11. A method according to claim 10, wherein said elongated members are
2 shaped like screws.

1 12. A method according to claim 10, wherein said elongated members are
2 telescoping screws having multiple layers, wherein said at least one motor causes
3 an inner layer to extend beyond an immediately surrounding layer or to retract into
4 an immediately surrounding layer.

1 13. A method according to claim 10, wherein the anchor comprises a number
2 of elongated members selected from the group of numbers that consists of three,
3 four, five, six, seven, eight, nine, ten, eleven, twelve, thirteen, fourteen, fifteen,
4 sixteen, seventeen, eighteen, nineteen, and twenty.

1 14. A method according to claim 10, wherein the anchor comprises a number
2 of motors that is equal to the number of elongated members, wherein each motor
3 is operably linked to an elongated member and causes said linked elongated
4 member to move from a storage position to an extended operative position and
5 from an extended operative position to a storage position.

1 15. A method according to claim 10, wherein said method further comprises
2 causing said at least one motor to move each operably linked elongated member
3 from an extended operative position to a retracted storage position.

1 16. A method according to claim 10, wherein the anchor further comprises a
2 camera, and the method further comprises using the camera to monitor and direct
3 positioning of the anchor relative to the penetrable medium.